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| 10/576,880 | 04/21/2006 | Yoon-Seob Eom | P-0773 | 5874 |
| 34610 7590 10/26/2009 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200 | | | | |
| EXAMINER | | | | |
| RAHIM, AZIM | | | | |
| ART UNIT | | PAPER NUMBER | | |
| 3744 | | | | |
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| 10/26/2009 | | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,880

Applicant(s)

EOM ET AL.

Examiner

AZIM RAHIM

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/21/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of “the dispersion ring being connected to the hub of the outdoor centrifugal fan by the supporting ring” as recited in claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: ***Window Type Air Conditioner with Condensate Dispersion Unit.***

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hosoda et al. (US 3,805,542).

Regarding claim 1, Hosoda et al. teach an air conditioner (figs. 8-10) comprising: a case (21) of which one side is positioned at an indoor side (side adjacent to evaporator 31) and another side is positioned at an outdoor side (side adjacent to condenser 34); an indoor heat exchanger (evaporator 31) mounted inside the case (illustrated in figure 9) positioned at the indoor side (illustrated in figure 9) thus to be heat-exchanged with the indoor air (see arrow flowing through the evaporator); an indoor centrifugal fan (29) opposite to the indoor heat exchanger (illustrated in figure 9) for generating a blowing force so that the indoor air can pass through the indoor heat exchanger (the indoor heat exchanger is capable of performing this

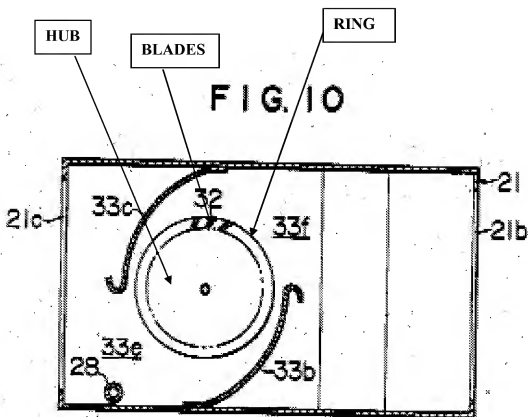
intended use function); an outdoor heat exchanger (34) mounted inside the case (illustrated in figure 9) positioned at the outdoor side (illustrated in figure 9) thus to be heat-exchanged with the outdoor air (see arrow flowing through the condenser); and an outdoor centrifugal fan (32) opposite to the outdoor heat exchanger (illustrated in figure 9) that generates a centrifugal force to blow the outdoor air [this intended use limitation is capable of being performed by the outdoor centrifugal fan], wherein the outdoor centrifugal fan comprises: a hub (annotated below) formed in a disc shape (illustrated below) connected to a driving motor (35) by a rotational shaft (shaft extending between the motor and both blowers 29 and 32); a plurality of blades (annotated below) each having one end protruding from a surface of the hub (illustrated below) and disposed at the outer side of the hub in a circumferential direction (illustrated below) with the same interval therebetween (illustrated below); and a supporting ring (the ring as annotated below) coupled to another end of each of the plurality of blades to support the blades [as illustrated below, portions of the ring are disposed in a vicinity between the blades]. It is noted that the Applicant has not specified the boundaries of the indoor side and the outdoor side.

Regarding claim 2, Hosoda et al. teach the limitation of an outdoor air suction port (21a) being respectively formed at both lateral surfaces of the case (as illustrated in figure 8, since the outdoor suction port has a surface area, it is disposed at "lateral sides" of the case) positioned at the outdoor side (illustrated in figure 8), and an outdoor air discharge port (34) is formed at the rear surface of the case (illustrated in figure 8).

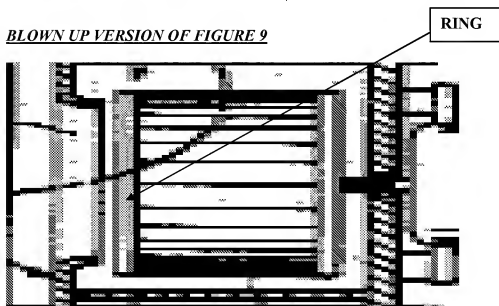
Regarding claim 3, Hosoda et al. teach the limitation of the outdoor fan being installed in a shroud (the combination of 24 and 25) mounted inside the case positioned at the indoor side (illustrated in figure 9), and the shroud is provided with an air guide (25) that guides air blown from the outdoor centrifugal fan to the outdoor heat exchanger [illustrated in figure 9].

Regarding claims 5 and 6, Hosoda et al. teach a condensing water dispersing ring (39) mounted at the outdoor centrifugal fan (illustrated in figure 9) for dispersing condensing water collected at the lower surface of the case to the outdoor heat exchanger (the dispersion unit is positioned to perform this intended use function), the condensing water dispersing ring being connected to the outdoor fan thus to be rotated together for dispersing the condensing water (see column 7, lines 7-10).

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BLOWN UP VERSION OF FIGURE 9



Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hosoda et al. as applied to claim 1 above and further in view of Scott (US 3,872,684).

Regarding claims 7-9, Hosoda et al. teach all the limitations of the claimed invention, but fail to explicitly teach, wherein the dispersion ring is connected to a hub of the outdoor centrifugal fan by a supporting ring, and wherein the dispersing ring is respectively connected to the blades of the outdoor centrifugal fan by the supporting ring thus to form a ring shape, and wherein the dispersion ring is connected to the hub of the centrifugal fan by a plurality of support ribs.

Scott teaches a condensate dispersion unit assembly (referring to figures 1-5) comprising a dispersion ring (24) connected to the fan via a plurality of support ribs (lugs 22), wherein both the dispersion ring and support ribs are connected to a fan (18).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the air conditioner of Hosoda et al. to include the condensation dispersion unit assembly to a fan as taught by Scott in order to prevent insects and bacteria from building up inside of the air conditioner, thus preventing a user from being contaminated.

Response to Arguments

8. Applicant's arguments with respect to claims 1-3 and 5-9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weiland (US 2,134,349).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIM RAHIM whose telephone number is (571) 270-1998. The examiner can normally be reached on Monday - Thursday 7am - 3pm EST and Friday 7am - 9:30am EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules can be reached on 571-272-6681 or Cheryl Tyler at 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. R./
Examiner, Art Unit 3744
10/15/2009

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744